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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,291	03/14/2007	Duncan Hamilton Reid	0002978USU/2297	4133
27623	7590	02/18/2010	EXAMINER	
OHLANDT, GREELEY, RUGGIERO & PERLE, LLP ONE LANDMARK SQUARE, 10TH FLOOR STAMFORD, CT 06901			LEWIS, JUSTIN V	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,291	Applicant(s) REID ET AL.	
	Examiner JUSTIN V. LEWIS	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 24-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 24-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>18 December 2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicants' amendment, filed on 26 October 2009, is acknowledged. Amended claims 11-15, 18 and 24 and new claims 25-32 have been entered. Accordingly, claims 1-22 and 24-32 are currently pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-10, 18-22, 24 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0104176 to Schwenk ("Schwenk") and U.S. Patent No. 4,290,630 to Lee ("Lee").

Regarding claim 1, Schwenk and Lee disclose a security substrate comprising: i) a substrate (Schwenk fig.1; Lee fig. 5); and ii) at least two elongate security elements

Art Unit: 3725

(Schwenk 5a-b and paragraph 17; Lee threads 2 and col. 3, lines 53-60) wherein said at least two security elements are at least partially embedded within said substrate and run substantially parallel to each other with a gap therebetween, wherein said at least two security elements and said gap occupy a zone (see Schwenk fig. 1 and Lee figs. 3a-d), but fail to specifically disclose: i) each security element having a width of less than or equal to 6mm; ii) the gap between parallel security elements being no greater than 10mm; and iii) said zone having a total cross-directional width that is less than or equal to 18mm. However, it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 2, Schwenk and Lee disclose a security substrate as claimed in claim 1, but fail to specifically disclose said at least two security elements each having a width of less than or equal to 4mm. However, it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 3, Schwenk and Lee disclose a security substrate as claimed in claim 2, but fail to specifically disclose said at least two security elements each having a width of less than or equal to 2mm. However, it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the

Art Unit: 3725

optimum or workable ranges by routine experimentation.” In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 4, Schwenk and Lee disclose a security substrate as claimed in claim 1, but fail to specifically disclose said width of said zone being less than or equal to 14mm. However, it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 5, Schwenk and Lee disclose a security substrate as claimed in claim 1, but fail to specifically disclose said gap being greater than or equal to 1mm. However, it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 6, Schwenk and Lee disclose a security substrate as claimed in claim 5, but fail to specifically disclose said gap being greater than or equal to 2mm. However, it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 7, Schwenk and Lee disclose a security substrate as claimed in claim 1, wherein said at least two security elements have identical security features (see Schwenk fig. 1 and Lee figs. 3a-d).

Regarding claim 8, Schwenk and Lee disclose a security substrate as claimed in claim 1, wherein said at least two security elements have different security features (see Schwenk figs. 2a-b and Lee figs. 3e-g).

Regarding claim 9, Schwenk and Lee disclose a security substrate as claimed in claim 1, wherein said at least two security elements wander from a linear path in a cross-direction of said substrate, and wherein said cross-directional width of said zone includes an amplitude of said wander (see Schwenk figs. 2a-b and Lee figs. 3a-g)

Regarding claim 10, Schwenk and Lee disclose a security substrate as claimed in claim 1, wherein at least one of said at least two security elements are wholly embedded within said substrate (see Schwenk paragraph 18 and Lee abstract).

Regarding claim 18, Schwenk and Lee disclose a security article comprising: i) a substrate (Schwenk fig.1; Lee fig. 5); and ii) at least two elongate security elements (Schwenk 5a-b and paragraph 17; Lee threads 2 and col. 3, lines 53-60), wherein said at least two security elements are at least partially embedded within said substrate and run substantially parallel to each other with a gap therebetween, wherein said at least two security elements and said gap occupy a zone (see Schwenk fig. 1 and Lee figs. 3a-d), but fails to specifically disclose: i) each of said security elements having a width of less than or equal to 6mm; ii) said gap between said security elements being no greater than 10mm; and iii) said zone having a total cross-directional width that is less than or equal to 18mm. However, it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or

Art Unit: 3725

workable ranges by routine experimentation.” In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 19, Schwenk and Lee disclose a security substrate as claimed in claim 1, wherein said substrate is plastic (see Schwenk paragraph 2 and Lee col. 1, lines 15-16).

Regarding claim 20, Schwenk and Lee disclose a security substrate as claimed in claim 19, wherein said substrate is a filmic plastic (see Schwenk paragraph 2 and Lee col. 1, lines 15-16).

Regarding claim 21, Schwenk and Lee disclose a security substrate as claimed in claim 1, wherein said substrate is a mix of paper and plastic fibres (see Schwenk paragraph 2 and Lee col. 1, lines 15-16).

Regarding claim 22, Schwenk and Lee disclose a security substrate as claimed in claim 1, wherein said substrate is paper (see Schwenk abstract and Lee col. 1, line 17).

Regarding claim 24, Schwenk and Lee disclose a security article as claimed in claim 18, wherein said security article is a banknote (see Schwenk paragraph 24 and Lee col. 1, lines 8-9).

Regarding claim 30, Schwenk and Lee disclose a security article as claimed in claim 18, wherein said security article is a passport (see Schwenk paragraph 24 and Lee col. 1, lines 5-10).

Regarding claim 31, Schwenk and Lee disclose a security article as claimed in claim 18, wherein said security article is a certificate (see Schwenk paragraph 24 and Lee col. 1, lines 5-10).

Regarding claim 32, Schwenk and Lee disclose a security article as claimed in claim 18, wherein said security article is a document of value (see Schwenk paragraph 24 and Lee col. 1, lines 5-10).

5. Claims 11-17 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwenk and Lee in view of U.S. Patent No. 6,471,247 to Hardwick et al. ("Hardwick").

Regarding claim 11, Schwenk and Lee disclose a security substrate as claimed in claim 1, but fails to disclose at least one of said at least two security elements being exposed at windows in at least one surface of said substrate.

Hardwick teaches the concept of providing a window in at least one surface of a substrate (18, see fig. 5, showing a single security element and fig. 2, showing multiple security elements exposed in the window).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to position a Hardwick window on the Schwenk and Lee substrates in order to render a security device lying beneath visible, as explicitly taught by Hardwick (see abstract).

Regarding claim 12, Schwenk and Lee in view of Hardwick discloses a security substrate as claimed in claim 11, wherein all of said at least two security elements are exposed via the same window (Hardwick fig. 2).

Regarding claim 13, Schwenk and Lee in view of Hardwick discloses a security substrate as claimed in claim 1, wherein each of said at least two security elements is exposed at separate windows to those at which the other security element is exposed (note that windows may be positioned upon the substrates as desired).

Regarding claim 14, Schwenk and Lee in view of Hardwick discloses a security substrate as claimed in claim 13, wherein said window via which one of said at least two security elements is exposed is in register with said window via which another of said at least two security elements is exposed (note that windows may be positioned upon the substrates as desired).

Regarding claim 15, Schwenk and Lee in view of Hardwick discloses a security substrate as claimed in claim 13, wherein said window via which one of said at least two security elements is exposed is not in register with said window via which another of said at least two security elements is exposed (note that windows may be positioned upon the substrates as desired).

Regarding claim 16, Schwenk and Lee in view of Hardwick discloses a security substrate as claimed in claim 1, wherein each of said at least two security elements is provided with at least one security feature which is registered with at least one security feature on another of said at least two security elements (note that windows may be positioned upon the substrates as desired).

Regarding claim 17, Schwenk and Lee in view of Hardwick discloses a security substrate as claimed in claim 1, wherein each of said at least two security elements is provided with at least one security feature which is registered with at least one security

Art Unit: 3725

feature on said substrate (note that windows may be positioned upon the substrates as desired).

Regarding claim 25, Schwenk and Lee in view of Hardwick discloses a security substrate as claimed in claim 1, wherein at least one of said two security elements is exposed in at least one hole or aperture through the substrate (see Hardwick fig. 2).

Regarding claim 26, Schwenk and Lee in view of Hardwick discloses a security substrate as claimed in claim 25, wherein all of said at least two security elements are exposed at the same hole or aperture (see Hardwick fig. 2).

Regarding claim 27, Schwenk and Lee in view of Hardwick discloses a security substrate as claimed in claim 25, wherein each of said at least two security elements is exposed in a separate hole or aperture to those at which the other security element is exposed (note that windows may be positioned upon the substrates as desired).

Regarding claim 28, Schwenk and Lee in view of Hardwick discloses a security substrate as claimed in claim 27, wherein said hole or aperture via which one of said at least two security elements is exposed is in register with said hole or aperture via which another of said at least two security elements is exposed (note that windows may be positioned upon the substrates as desired).

Regarding claim 29, Schwenk and Lee in view of Hardwick discloses a security substrate as claimed in claim 27, wherein said hole or aperture via which one of said at least two elements is exposed is not in register with said hole or aperture at which another of said at least two security elements is exposed (note that windows may be positioned upon the substrates as desired).

Response to Arguments

In response to Applicants' argument that the fibers of Schwenk form part of the substrate itself and are not elongate security elements as required in claims 1 and 18 (see Applicants' Arguments/Remarks pg. 8, lines 12-13), Examiner respectfully asserts that as may be seen in the figures, the fibers function as security elements.

Additionally, they are elongate in form. As such, they are elongate security elements.

In response to Applicants' argument that Lee fails to teach at least two elongate security elements as recited by claims 1 and 18 (see Applicants' Arguments/Remarks pg. 8, lines 14-19), Examiner respectfully asserts that as may be seen in the figures, many more than two elongate security elements are shown.

In response to Applicants' argument that Schwenk and Lee fail to disclose certain claimed ranges (see Applicants' Arguments/Remarks pg. 8, line 25- pg. 9, line 3), Examiner respectfully asserts that as set forth in the rejection above, it has been held that "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 3725

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN V. LEWIS whose telephone number is (571)270-5052. The examiner can normally be reached on M-F 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dana Ross/
Supervisory Patent Examiner, Art Unit 3725
/JVL/